DOCUMENT RESUME

ED 224 112 EA 015 198

AUTHOR Purkey, Stewart C.; Smith, Marshall S.
TITLE Ends Not Means: The Policy Implications of Effective Schools Research. Draft.
INSTITUTION Wisconsin Center for Education Research, Madison.
SPONS AGENCY National Inst. of Education (ED), Washington, DC.
PUB DATE Aug 82
GRANT NIE-G-81-0009
NOTE 23p.; Paper prepared for a symposium on exemplary schools and their characteristics, presented at the Annual Meeting of the American Psychological Association (Washington, DC, August 23-27, 1982).
PUB TYPE Information Analyses (070) -- Viewpoints (120) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Academic Achievement; *Change Strategies; Educational Change; *Educational Environment; Educational Innovation; Educationally Disadvantaged; Educational Research; Elementary Secondary Education; Federal Aid; *Government School Relationship; Needs Assessment; Participative Decision Making; *Policy Formation; *Research Utilization; School Based Management; *School Effectiveness; State Aid; State School District Relationship
IDENTIFIERS *School Culture

ABSTRACT

The authors reviewed research on effective schools, literature on the implementation of educational innovation, and current theories of school organization. A synthesis of findings from this research indicates that differences among schools do have an effect on student achievement. Specifically, it is the school's culture that is responsible for that effect. Thirteen variables are identified as contributing to the development of a school culture conducive to academic achievement. Drawing on recent literature, the authors suggest federal and state policies that would be likely to facilitate the development of effective schools. Key recommendations include policies that promote building-specific, whole-school improvement efforts and that rely on outcomes as the preferable means of monitoring and evaluating school improvement efforts. (Author)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

Wisconsin Center for Education Research
University of Wisconsin-Madison · School of Education
1025 West Johnson Street · Madison, Wisconsin 53706 · (608) 263-4200

ED224112

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.
Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Stewart Purkey,
Marshall S. Smith
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

ENDS NOT MEANS: THE POLICY IMPLICATIONS OF EFFECTIVE SCHOOLS RESEARCH

Stewart C. Purkey and Marshall S. Smith

Wisconsin Center for Education Research
School of Education
University of Wisconsin-Madison

August, 1982
(draft)

CS 010 198

This paper was prepared for a symposium on exemplary schools and their characteristics, presented at the convention of the American Psychological Association, Washington, D.C., August 1982.

The research reported in this paper was funded by the Wisconsin Center for Education Research which is supported in part by a grant from the National Institute of Education (Grant No. NIE-G-81-0009). The opinions expressed in this paper do not necessarily reflect the position, policy, or endorsement of the National Institute of Education.

ENDS NOT MEANS: THE POLICY IMPLICATIONS OF EFFECTIVE SCHOOLS RESEARCH

Effective Schools--A Cultural Perspective

The major, and heartening, conclusion of the research on effective schools is that differences among schools do have an impact on the achievement of students. This finding is supported by research, done primarily in urban elementary schools, that has described schools whose students' scores on standardized tests in reading and math are better than would be predicted given their family background.

Whereas previous research, from about the mid 1960s on, found that factors such as class size, teacher salaries, the number of books in the library, and the existence of compensatory education programs had little relationship to academic achievement (Averch et al., 1972; Coleman et al., 1966; Hanushek, 1981; Jencks et al., 1972; Mullin & Summers, 1981; Murnane, 1980), this "new" research has identifed characteristics of schools that seem to have influence on scholastic performance (see reviews by Austin, 1981; Clark et al., 1980; Hersh et al., 1981; Phi Delta Kappa, 1980; Purkey & Smith, 1982; Rutter, 1981; Tomlinson, 1980)[1].

In an earlier paper (Purkey and Smith, 1982) we reviewed the school effectiveness literature[2]. While we found the research weak in many respects, most notable in its tendency to present narrow, oft times simplistic recipes for school improvement derived from non-experimental data, theory and common sense do support many of its findings. In particular, the most persuasive research suggests that academic success

is determined by the school's culture (Brookover et al., 1979; Rutter et al., 1979). The notion of school culture assumes that schools are complex webs of values, norms, roles, attitudes and the like, existing within distinct organizational structures with differing patterns of communicaton, authority, educational techniques and so on. More simply, schools are seen as having dynamic social systems made up of interrelated factors (Brookover et al., 1979), each school having a distinctive climate or "ethos" (Rutter et al., 1979). An academically effective school is distinguished by its culture: a structure, process, and climate of values and norms that channel staff and students in the direction of successful teaching and learning.

Creating effective schools, therefore, becomes a matter of altering the schools' culture. Changing schools becomes a matter of changing people, their behaviors and attitudes, as well as school organization and norms.

The appropriateness of the school culture notion is supported by ideas derived from organization theory and from research on the implementation of education innovation. While empirical data on school organization are limited (Miles, 1981) there is a growing consensus that schools are not rational, hierarchical institutions responsive to top-down command structures in which fundamental change can be mandated at one level with absolute confidence that it will be carried out at subordinate levels (Derr and Deal, 1979; Dornbush and Scott, 1975; Meyer and Rowan, 1978; Weick, 1976). Instead, some theorists think that schools are "loosely coupled systems" (Weick, 1976) having weak linkage between administration levels and the relatively autonoumous classroom.

Studies of implementation also reinforce the validity of the school

culture perspective. In essence, successful implementation means changing the school culture, the wholesale influencing of the total school climate (Hargrove et al., 1981). Though specific tactics may vary, the general strategy is best characterized as one that promotes collaborative planning, collegial work, and a school atmosphere conducive to experimentation and evaluation (Deal et al., 1977; Hargrove et al., 1981; Hawley, 1978; Little, 1981; McLaughlin, 1978). Miller (1980) suggests it is an approach that sees teachers as part of an entire school organization engaged in development activities that take place over time. Successful change efforts are therefore more likely to be realized when the entire school culture is affected. This ongoing activity is best done by involving the people affected, at appropriate levels and fequency, in the decision-making process (Lipham, 1981).

Assuming that it is the school's culture that accounts for schools having differential impact on academic achievement, it is reasonable to suggest a number of characteristics that are likely to be associated with school cultures that encourage academic achievement. Since we have presented a complete discussion elsewhere (Purkey and Smith, 1982) we will here only list those factors. We emphasize, however, that the various characterists offered below are, in addition to being tentative, likely to be interrelated and to have a cumulative effect. Also, it seems likely that the first nine are relatively easier to implement and seem likely to facilitate the development of the final four. With the realization that we may have overlooked a key variable, the literature on school effectiveness suggests, then, that an effective school culture is likely to be composed of the following features:

1. School-site management -- a considerable amount of autonomy for

each building in determining the exact means by which they address the problem of increasing academic performance.

2. Leadership -- though we are suspicious of the "Great Principal" theory, leadership from either the administration or group(s) of teachers is necessary to initiate and maintain the improvement process.

3. Staff stability -- frequent transfers are likely to retard, if not prevent, the growth of a coherent and ongoing school personality, especially in early phases of the change process.

4. Curriculum articulation and organization -- a planned, coordinated curriculum that increases the amount of time students spend studying basic skills and other academic disciplines.

5. Staff development -- school-wide staff development that is ongoing and linked to the expressed concerns of the staff and the school's specific instructional and organizational needs.

6. Parental involvement and support -- though the evidence is mixed, obtaining parent support is likely to positively influence student achievement (perhaps by increasing motivation).

7. School-wide recognition of academic success -- publicly honoring academic achievement and stressing its importance encourages students to adopt similar norms and values.

8. Maximized learning time -- more of the school day and more of the class period would be devoted to active learning activities in academic areas; class periods would be free from interruptions and disruptions.

9. District support -- fundamental change, building-level management, staff stability, etc. all depend upon support from the district office.

The preceding characteristics, significant in their own right, also set the stage for the four features described below. It is these last four that constitute the dynamic of the school's culture and seem responsible for an atmosphere that leads to increased student achievement.

10. Collaborative planning and collegial relationships -- change attempts are more successful when teachers and administratiors work together; collegiality breaks down barriers between departments and among teachers and administrators, it encourages the kind of intellectual sharing that can lead to consensus, and it promotes feelings of unity and commonality among the staff.

11. Sense of community -- schools can build feelings of community that contribute to reduced alienation and increased achievement.

12. Clear goals and high expectations commonly shared -- schools whose staff agree on their goals (e.g. academic achievement) and expectations (e.g. for work and achievement) are more likely to be successful in that they have channeled their energy and efforts toward a mutually agreed upon purpose.

13. Order and discipline -- the seriousness and purposefulness with which the school aproaches its task are communicated by the order and discipline it maintains in its building and classrooms.

Within the framework provided by the first nine characteristics the last four must develop over time as people begin to think and behave in new ways. This process requires that people work together toward common ends. It is a participatory approach based on the notion that how a school moves toward increasing effectiveness is critical to the comprehensiveness, stability and longevity of the new culture it seeks.

While strategies for beginning this process may well vary we lean toward a "political" strategy which builds coalitions of support (Hargrove et al., 1981; Miles, 1981; Pfeffer, 1981). Various interest groups might engage in a bargaining process characterized by political and social exchange (Talbert, 1980) and develop collaborative strategies leading toward a sense of ownership, commitment, and general consensus among the staff of the school.

In summation, we have argued that differences among schools have an impact on students' academic performance. By critically studying academically effective schools we can identify characteristics that together create a school culture conducive to student achievement. These characteristics, and hence the school culture, are "alterable" (Bloom, 1981) via faculty and administration collaboration and shared decision-making. We strongly argue that the process by which schools are made more academically effective is crucial. We have offered a political approach to beginning the improvement process that recognizes people's tendency to operate on the basis of their perceived self-interest as well as on their professional desire to educate children. In the remainder of this paper we will pull out the implications of this research for federal and state policy and suggest policy approaches congruent with those implications.

Federal and State Policy for Bottom-Up Planning

Clearly the effective schools research is most applicable at the district and building level. However, though specific policy proposals at the state and federal level do not flow directly from effective schools research, three points are of particular significance in

thinking about policy recommendations. First, the literature does suggest the arena in which change must take place -- the school building -- if children's academic achievement is to be increased. Second, the logic of the effective schools research leads to the conclusion that treating the whole school is likely to have more impact on the achievement of disadvantaged students then are "marginal" programs that separate categories of students and/or fracture the instructional activities of the school[3]. Finally, effective schools are likely to result from a school culture which will differ from school to school.

Therefore, federal and state policy should be directed toward encouraging school-level, school-specific change -- change from the bottom-up. This poses a conundrum. How can top-down federal and state policy foster bottom-up planning and initiative? What federal and state policies will permit diversity, stimulate schools to change, and encourage, at the building-level, the kinds of activities that the effective schools research suggest should happen? Though the dilemma is real enough answers can be derived from policy literature that has appeared in the past couple of years.

Building on Elmore's (1979-80) notion of "backward mapping" we might begin by asking at the school building level what are the school and teacher behaviors and conditions in need of reform. (Here, obviously, the characteristics of academically successful schools suggested by the effective schools research offer criteria that are of use.) The question then becomes, what policies will direct resources to schools allowing them to address, in accordance with their unique situations, the problems they have targeted?

Through federal education policy has had mixed results (Kaestle &

Smith, 1982, pp. 23-27) of concern here is the tendency for policies such as Title I to lead to schools focusing on compliance with financial regulations at the expense of concentrating on program quality issues (McLaughlin and McDonnell, 1982). This suggests that, at the very least, existing programs need to be overhauled, and simplified, so that schools are not so mired in fiscal accountability that they can not modify federally sponsored programs to take advantage of education research and educationally effective practices that are adaptable to their specific conditions and environment (see Turnbull, Smith, and Ginsburg, 1981).

We emphasize that this is not an argument for general aid, nor does it imply that categorical programs are inappropriate federal policy (though we note McLaughlin and McDonnell's, 1982, warning that such programs often conflict with strong norms of local control in many states, with detrimental consequences). Education history in the United States demonstrates that disadvantaged students in general, and particularly in some states, are in need of federal assistance and, at times, protection (Kaestle and Smith, 1982). While it makes sense to leave overall academic achievement to the province of the states, federal policy is rightly concerned with issues relating to basic constitutional rights and social justice (Kaestle and Smith, 1982). This suggests that the federal government might well use funding, and accompanying regulations, to enhance the educational opportunities of disadvantaged students by stimulating schools to address certain issues and integrate specified goals into the overall school program.

A possible model might be the Youth Act of 1980 which would have targeted funds to the schools with the highest percentages of needy

students while encouraging program quality through competition. Following that model, planning grants could be provided to eligible schools (determined by the number of disadvantaged students or other need) in a state or district. Certain goals would be specified -- developing school-wide plans addressing drop outs, raising low achievement, assisting non-English speaking students, and the like -- and planning procedures required -- school-wide committees, school and community collaboration, and so on. The effective schools research can identify those goals and processes that are most likely to lead to school improvement for all: school-site management, staff stability, district support, collaborative planning and so on. Schools would compete for funding; the criteria for selection would be the quality of the plan, and the competition among schools would enhance that quality. Successful plans would get funding for a set length of time, and funding continuation would be based upon meeting the goals as stated in the school plan.

Indeed, such a model could be implemented at both the federal and the state level. At the federal level categorical money could be set aside that would be used by districts or schools with the most need as determined by criteria developed in consultation with local and state education people. How the money would be used (the nature of the program) would not be monitored, only whether improvement is seen in the areas targeted. This would insure that eduationally sound practices are not lost in regulatory thickets. Allowing schools to tailor their programs to the demands of their situation follows directly from effective schools research that finds school-specific strategies to be more likely to generate changes that will result in a school culture

conducive to learning. At the state level, block grants provide discretionary funds that could be used in the same manner.

At the federal level, alternative policies, perhaps less directly implied by the school effectiveness research, might include differential treatment of the states or the use of matching funds. Several authors have advocated differential treatment of t tates (e.g. McLaughlin and McDonnell, 1982; Turnbull, Smith, and Ginsburg, 1981) as a way of maximizing flexibility while retaining accountability where it is needed most. The flexibility allowed some states might encourage the idiosyncratic approach to school improvement suggested by the school effectiveness literature, and encourage states to experiment with school improvement strategies that focus on whole-school reform.

Differential treatment recommendations are basically similar: they stem from common recognition that the states differ, often dramatically, in their capacity and will to serve disadvantaged students; they maintain tight fiscal and programmatic requirements for states who have demonstated either incapacity or lack of will; and, they allow considerably more discretion by those states that have a legislative history of responding to the needs of disadvantaged students. One proposal (Turnbull, Smith, and Ginsburg, 1981) suggests keying exemptions on the existance of state laws fulfilling preset criteria. For example, states with legislation that provides for drop out prevention programs would be subject to outcome evaluation only, while in states that had yet to address that issue federal dollars would continue to be tracked to the school and student level. (As a side benefit such a policy might encourage states to pass education legislation, if for no other reason, to gain relief from the burden of

close monitoring.)

The second alternative, the use of matching funds, has the same sort of incentive intent. Matching funds would reward states that had begun, on their own, programs aimed at disadvantaged students. Again, the funding would continue as long as stated goals were being met. Federal influence could be increased under this program by channeling matching funds only to states whose programs stimulate school-based management, collaborative planning, shared decision-making and the like aimed at whole-school improvement to increase the academic performance of special needs students.

State policies, in addition to being tied in to the programs outlined above, could also be directed at promoting building level change and whole-school treatments. While state education agency roles vary from being highly directive to simply providing assistance one possibility would be using state regulatory power to direct local attention to state-identified priorities and strategies for school improvement (McLaughlin and McDonnell, 1982). As indicated above the states could also use financial aid to motivate local districts or schools to begin an effective schools program or to more adequately serve the needs of certain groups of students. Supplementary funding has the advantage of being goal specific while not encroaching upon local control, initiative, or variation. In any event, regardless of the exact mechanisms used state policy would, like federal policy, be constructed so as to maximize local planning and adaptation while insuring that needy students were not educationally deprived. Other types of assistance that SEAs might provide include conducting, and funding, inservice training for teachers on a school-by-school basis,

conducting workshops to train principals or key staff members to be instructional leaders and so on.

In conclusion, the effective schools research and past experience with federal (and state) education programs suggest 1) that school differences do have an effect upon student achievement, 2) that it is the culture of the whole school that creates that effect, 3) that federal and state policy would best concern itself with instigating building-specific, whole-school improvement efforts, 4) that outcomes are the preferable means of monitoring and evaluating such efforts, and 5) that carrots work better than sticks in guaranteeing that the needs of disadvantaged students are met. The question, of course, remains whether in an era of financial retrenchment, fiscal conservatism, and general unwillingness to invest in educational programs the political will exists to act on the basis of what we now know about making schools effective and the policies will that take us there.

FOOTNOTES

[1]It is easy to conclude that the findings of the new research contradict the findings of Coleman et al. (1966), Jencks et al. (1972) and others. In fact the results are consistent though the implications may differ. First, the new studies do not refute the general finding that easily measurable differences among schools (class size variation from twenty to thiry pupils, existing differences in teacher preservice training, teacher experience and salaries, number of books in the library, etc.) have little consistent relationship to student achievement. The new studies look at other variables. Second, the new studies do not find that there are overall large differences in achievement among existing schools. The new studies generally do not gather data of the sort required for such analyses. Instead they identify especially "good" schools and examine their characteristics or they compare the characteristics of "high" scoring and "low" scoring schools. They then imagine the improvement that would result, for example, if the least "effective" schools (the bottom 20 percent) improved to an achievement level equal to the most "effective" schools (the top 20 percent). For the average sixth grader the "old literature" estimates that this improvement would be on the order of two-thirds of a standard deviation or about one full grade level of achievement (see Jencks et al., pp. 123-124). This estimate is consistent with the few "new" studies that report sufficient data to allow us to make a quantitative estimate of the achievement difference between "effective" and "ineffective" schools. Third, the new studies imagine changes in

schools that go beyond existing differences among schools. If our very best schools improve they will set a new standard for other schools to achieve.

[2]We examined the studies, clustered by research design and methodology or subject, that have received the most attention in the school effectiveness literature. We looked at the following outlier studies: G.R. Austin, Process Evaluation: A Comprehensive Study of Outliers (Baltimore, Md.: Maryland State Department of Education, 1978); W.B. Brookover & J.M. Schneider, "Academic Environments and Elementary School Achievement," Journal of Research and Development in Education, Vol. 9, No. 1, 1975; L.W. Lezotte, R. Edmonds, & G. Ratner, A Final Report: Remedy for School Failure to Equitably Deliver Basic School Skills (East Lansing, Mich.: Department of Urban and Metropolitan Studies, Michigan State University, September 1974); New York State Department of Education, Reading Achievement Related to Educational and Environmental Conditions in 12 New York City Elementary Schools (Albany, N.Y.: Division of Education Evaluation, March 1974); New York State Department of Education, School Factors Influencing Reading Achievement: A Case Study of Two Inner City Schools (Albany, N.Y.: Office of Education Performance Review, 1974); New York State Department of Education, Three Strategies for Studying the Effects of School Processes (Albany, N.Y.: Bureau of School Programs Evaluation, March 1976); and J.L. Spartz, A.L. Valdes, W.J. McCormick, J. Myers & W.J. Geppert, Delaware Educational Accountability System Case Studies: Elementary Schools Grades 1-4 (Dover, Delaware: Delaware Department of Public Instruction, 1977).

We examined eight case studies: W.B. Brookover, C. Beady, P.

Flood, J. Schweitzer, & J. Wisenbaker, School Social Systems and Student Achievement: Schools Can Make a Difference (New York, N.Y.: Praeger Publishers, 1979); W.B. Brookover & L.W. Lezotte, Changes in School Characteristics Coincident with Changes in Student Achievement (East Lansing, Mich.: Institute for Research on Teaching, College of Education, Michingan State University, 1979); California State Department of Education, Report on the Special Studies of Selected ECE Schools with Increasing and Decreasing Reading Scores (Sacramento, Cal.: Office of Program Evaluation and Research, 1980); B.C. Glenn, What Works? An Examination of Effective Schools for Poor Black Children (Cambridge, Mass.: Center for Law and Education, Harvard University, 1981); D.U. Levine & J. Stark, Extended Summary and Conclusions: Institutional and Organizational Arrangements and Processes for Improving Academic Achievement at Inner City Elementary Schools (Kansas City, Mo.: Universtiy of Missouri-Kansas City, School of Education, Center for the Study of Metropolitan Problems in Education, August 1981); M. Rutter, B. Maughan, P. Mortimore, J. Ouston, with A. Smith, Fifteen Thousand Hours: Secondary Schools and their Effects on Children (Cambridge, Mass.: Harvard University Press, 1979); R.L. Venezky & L.F. Winfield, Schools That Succeed Beyond Expectations in Reading (Newark, Delaware: University of Delaware, 1979); and G. Weber, Inner-City Children Can be Taught to Read: Four Successful Schools (Washington, D.C.: Council for Basic Education, 1971).

We reviewed selected program evaluation studies: D. Armor et al., Analysis of the School Preferred Reading Program in Selected Los Angeles Minority Schools (Santa Monica, Calif.: Rand Corporation, 1976); D. Doss & F. Holley, "A Cause for National Pause: Title I Schoolwide Projects,"

Austin, Texas, Office of Research and Evaluation, Austin Independent School District, ORE Publication No. 81.55, 1982; M.G. Hunter, "Final Report of the Michigan Cost-Effectiveness Study," East Lansing, Mich., Michigan Department of Education, 1979; and D.A. Trisman, M.I. Waller, & G. Wilder, A Descriptive and Analytic Study of Compensatory Reading Programs. Final Report, Volume I (Princeton, N.J.: Educational Testing Service, 1976).

Finally, we examined two "other" studies: J.S. Coleman, T. Hoffer, & S. Kilgore, Public and Private Schools (draft)(Chicago, Ill.: National Opinion Research Center, University of Chicago, 1981); and, U.S. Department of Health, Education and Welfare, Violent Schools -- Safe Schools: The Safe School Study Report to the U.S. Congress, Vol. I (Washington, D.C.: U.S. Government Printing Office, January 1978).

[3]Doss & Holley (1982) summarized the results of a Title I evaluation comparing the effectiveness of "school-wide" programs with "pull-out" programs. They concluded that school-wide Title I programs have a greater positive effect on achievement than projects that isolate Title I pupils by "pulling them out" of the regular classroom. D. Doss & F. Holley, "A Cause for National Pause: Title I Schoolwide Projects," Austin, Texas, Office of Research and Evaluation, Austin Independent School District, ORE Publication No. 81.55, 1982.

References

Austin, G. R. "Exemplary Schools and their Identification." College Park, Md.: University of Maryland, Center for Educational Research and Development. Unpublished paper, 1981.

Averch, H. A., Carroll, S. J., Donaldson, T. S., Kiesling, H. J., & Pincus, J. How Effective Is Schooling? A Critical Review and Synthesis of Research Findings. Santa Monica, California: Rand Corporation, 1972.

Bloom, B. S. "The New Direction in Educational Research and Measurement: Alterable Variables." Chicago, Ill.: University of Chicago. Paper presented at annual meeting of AERA, Los Angeles, April 1981.

Brookover, W. B., Beady, C., Flood, P., Schweitzer, J., & Wisenbaker, J. School Social Systems and Student Achievement: Schools Can Make a Difference. New York, N.Y.: Praeger Publishers, 1979. (First published 1977 until title, Schools Can Make a Difference.)

Clark, D. L., Lotto, L. S., & McCarthy, M. M. "Factors Associated with Success in Urban Elementary Schools." Phi Delta Kappan, March 1980.

Coleman, J. S., Campbell, E., Hobson, C., McPartland, J., Mood, A., Weinfeld, F., & York, R. Equality of Educational Opportunity. Washington, D.C.: Government Printing Office, 1966.

Deal, T. E., Intili, J., Rosaler, J. A., & Stackhouse, A. The Early Childhood Education Program: An Assessment of Its Impact and Implementation. Sacramento, Calif.: California State Department of Education, May 1977.

Derr, C. B., & Deal, T. E. "Toward a Contingency Theory of Change in Education: Organizational Structure, Processes, and Symbolism." In King, E. (ed.), Education for Uncertainty. London: SAGE Publications, 1979.

Dornbush, S. M., & Scott, W. R. Evaluation and the Exercise of Authority. San Francisco, Cal.: Jossey-Bass, 1975.

Doss, D., & Holley, F. "A Cause for National Pause: Title I Schoolwide Projects." Austin, Texas: Office of Research and Evaluation, Austin Independent School District. ORE Publication No. 81.55, 1982.

Elmore, R. F. "Backward Mapping: Implementation Research and Policy Decision." Political Science Quarterly, Vol. 49, Winter 1979-80, 606-616.

Hanushek, E. A. Throwing Money at Schools. Unpublished paper, March 1981.

Hargrove, E. C., Graham, S. G., Ward, L. E., Abernethy, V., Cunningham, J., & Vaughn, W. K. Regulations and Schools: The Implementation of Equal Education for Handicapped Children. Nashville, Tenn.: Institute for Public Policy Studies, Vanderbilt University, 1981.

Hawley, W. D. "Horses Before Carts: Developing Adaptive Schools and the Limits of Innovation." In Mann, D. (ed.), Making Change Happen. New York: Teachers College Press, 1978.

Hersh, R. H., Carnine, D., Gall, M., Stockard, J., Carmack, M. A., & Gannon, P. "The Management of Education Professionals in Instructionally Effective Schools: Toward a Research Agenda." Unpublished paper. Eugene, Oregon: Center for Educational Policy and Management, University of Oregon, 1981.

Jencks, C. S., and Smith, M., Ackland, H., Bane, M. J., Cohen, D., Gintis, H., Heyns, B., & Michelson, S. Inequality: A Reassessment of the Effect of Family and Schooling in America. New York, N.Y.: Basic Books, Inc., 1972.

Kaestle, C. F., & Smith, M. S. The Federal Role in Elementary and Secondary Education, 1940-1980. Madison, Wis.: University of Wisconsin at Madison, Wisconsin Center for Education Research. (Conference draft.) A paper prepared for the conference on Federalism and the Federal Role in Education, sponsored by the Harvard Educational Review and the Institute of Educational Policy Studies, April 26, 1982, Cambridge, MA.

Lipham, J. M. Effective Principal, Effective School. Reston, Virginia: National Association of Secondary School Principals, 1971.

Little, J. W. "School Success and Staff Development in Urban Desegregated Schools: A Summary of Recently Completed Research." Boulder, Col.: Center for Action Research, Inc. Paper presented at the annual meeting of AERA, Los Angeles, April 1981.

McDonnell, L. M., & McLaughlin, M. W. Education Policy and the Role of the States. Santa Monica, Cal.: Rand Corporation, May 1982.

McLaughlin, M. W. "Implementation as Mutual Adaptation: Change in Classroom Organization." In Mann, D. (ed.), Making Change Happen, New York, N.Y.: Teacher's College Press, 1978.

Meyer, J.W., & Rowan, B. "The Structure of Educational Organizations." In Meyer, M. et al. (eds.), Environments and Organizations. San Francisco, Cal.: Jossey-Bass, 1978.

Miles, M. B. "Mapping the Common Properties of Schools." In Lehming, R. and Kane, M. (eds.), Improving Schools: Using What We Know.

Beverly Hills, Cal.: SAGE Publications, 1981.

Miller, L. "BYTES: Implications for Staff Development." In Denham, C. and Lieberman, A. (eds.), Time to Learn. Washington, D.C.: U.S. Department of Education, May 1980.

Mullin, S. P., & Summers, A. A. "Is More Better? A Review of the Evidence on the Effectiveness of Spending on Compensatory Education." Philadelphia, Pa.: University of Pennsylvania. Unpublished paper, May 1981.

Murnane, R. J. "Interpreting the Evidence on School Effectiveness." Working Paper No. 830. New Haven, Conn.: Institution for Social and Policy Studies, Yale University, December 1980.

Pfeffer, J. Power in Organizations. Marshfield, Mass.: Pitman Publishing, Inc., 1981.

Phi Delta Kappa. Why Do Some Urban Schools Succeed? Bloomington, Indiana: Phi Delta Kappa, 1980.

Purkey, S. C., & Smith, M. S. Effective Schools--A Review. Madison, Wis.: Wisconsin Center for Education Research, School of Education, University of Wisconsin at Madison, June 1982. A paper prepared for a conference on the implications of research on teaching for practice, sponsored by the National Institute of Education, Airlie House, Virginia, February 1982.

Rutter, M. "School Effects on Pupil Progress: Research Findings and Policy Implications." Paper prepared for the National Institute of Education, U.S. Department of Education, February 26-28, 1981.

Rutter, M., Maughan, B., Mortimore, P., Ouston, J. with Smith, A. Fifteen Thousand Hours: Secondary Schools and their Effects on Children. Cambridge, Mass.: Harvard University Press, 1979.

Talbert, J. E. School Organization and Institutional Change: Exchange and Power in Loosely Coupled Systems. Stanford, Cal.: Institute for Research on Educational Finance and Governance, Stanford University, 1980.

Tomlinson, T. M. "Student Ability, Student Background and Student Achievement: Another Look at Life in Effective Schools." Washington, D.C.: National Institute of Education, U.S. Department of Education. Paper presented at Conference on Effective Schools sponsored by Educational Testing Service, New York, N.Y., May 27-29, 1980.

Turnbull, B. J., Smith, M.S., & Ginsburg, A. L. "Issues for a New Administration: The Federal Role in Education." American Journal of Education, Vol. 89, No. 4, August 1981, 396-426.

Weick, K. E. "Educational Organizations as Loosely Coupled Systems." Administrative Science Quarterly, Vol. 21, March 1976, 1-19.